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MENDELSOHN & ASSOCIATES, P.C.
1500 JOHN F. KENNEDY BLVD.
SUITE 405
PHILADELPHIA, PA 19102

EXAMINER	
GUARINO, RAHEL	

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2611	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/766,347	CLEARY ET AL.
	Examiner	Art Unit
	Rahel Guarino	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,12-16 and 18-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,12-16 and 18-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 3,8,11,16,17,21 is withdrawn in view of the newly discovered reference(s) to Lin US 2003/0142730 and Hess et al. 5,812,600.

Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1,2,4-7,18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brueske et al. US, 6,670,901 in view of Younis et al. US, 6,134,430.

Re claim 1, Brueske discloses in a spread-spectrum receiver (fig.3), a method for processing a received analog spread-spectrum signal comprising:

determining whether to attenuate the received analog spread-spectrum signal (col. 3 lines 65 to col. 4 lines 10);

based on the attenuation determination, selectively attenuating the received analog spread-spectrum signal to generate a selectively attenuated analog spread-spectrum signal (col. 4 lines 22-33);

digitizing the selectively attenuated analog spread-spectrum signal to generate a digital spread-spectrum signal (col. 4 lines 39-45) and;

filtering (digital filters (fig.3 323,325)) the digital spread-spectrum signal in an attempt to compensate for interference in the received analog spread-spectrum signal to generate a filtered digital spread-spectrum signal (col. 4 lines 63-67), the attenuation determination is based on the amplitude of the digital spread-spectrum signal prior to the interference-compensation filtering and the de-spreading (col. 4 lines 42-44), does not teach de-spreading the filtered digital spread-spectrum signal, the attenuation determination is independent of any determination of bit error rate.

However, Younis discloses a digital signal processor (demodulator, 1250)) for de-spreading the filtered digital spread-spectrum signal to generate a de-spread digital signal (col. 7 lines 20-24, CDMA format col. 8 lines 26-31), the attenuation determination is independent of any determination of bit error rate (attenuator (1216) is determined by the control circuit (1260) such that the signal is at the required amplitude (col. 8 lines 8-11).

Therefore, taking the combined teaching of Brueske and Younis as a whole would have been rendered obvious to one skilled in the art to modify Brueske to utilize a digital signal processor as despreader and to determine the

attenuation for the benefit of yielding the desired signal at the minimum power consumption.

Re claim 2, the modified invention as claimed in claim 1, wherein the filtering attempts to compensate for off-channel interference in the received analog spread-spectrum signal (col. 4 lines 63 to col. 5 line 4; the digital filters (323,325) further attenuate the (I,Q) channels to compensate for the off-channel Interference,"Brueske").

Re claim 4, the modified invention as claimed in claim 1, wherein:
the received analog spread-spectrum signal is attenuated when the amplitude of the digital spread-spectrum signal is greater than an upper threshold, the received analog spread-spectrum signal is not attenuated when the amplitude of the digital spread-spectrum signal is less than a lower threshold, wherein the upper threshold is greater than the lower threshold (col. 4 lines 46-60 and col. 23 lines 9-23,"Younis"; the attenuator (fig. 2 (1216)) attenuates the amplitude of the input signal based on the ADC signal. The dynamic range threshold is enabled and disabled based on the upper and lower threshold).

Re claim 5, the modified invention as claimed in claim 4, wherein the upper threshold is greater than the lower threshold by an amount greater than the level of selective attenuation in order to provide hysteresis in the attenuation determination (col. 22 lines 50 to col. 23 lines 9-23,"Younis" (fig.11); Younis teaches upper threshold and lower threshold and the dynamic range threshold with the hysteresis to prevent toggling. With 6 dB hysteresis, when the threshold exceeds 51 dB loop (110a) is enabled and when the threshold is below 45dB is

disabled).

Re claim 6, the modified invention as claimed in claim 1, wherein:

the received analog spread-spectrum signal is a radio frequency (RF) signal; and further comprising:

converting the RF signal to an intermediate frequency (IF) prior to the digitization (col. 6 lines 34-38," Younis"); and converting the IF signal to baseband after digitization (col. 4 lines 4-14,"Younis").

Re claim 7, the modified invention as claimed in claim 6, wherein the filtering and the de-spreading are implemented at baseband (fig.4 (1250; demodulator), col. 7 lines 50-55," Younis").

Re claim 18, the modified invention as claimed in claim 1, wherein the attenuation determination is based on the amplitude of the digital spread-spectrum in a time domain (the application's specification para#40 discloses that "the conversion from the RF to baseband could be implemented in a single step, in either the analog or digital domain. By definition the time domain is in analog or digital domain or its original frequency. (col. 7 lines 9-20,"Younis").

Re claim 19, the modified invention as claimed in claim 6, wherein the attenuation determination is based on the amplitude of digital IF signal (col. 4 lines 40-44,"Younis"; the ADC converts the IF signal into IF sampled digital signal and the amplitude is attenuated based on the IF sampled digital signal).

Re claim 20, the modified invention as claimed in claim 1, wherein:

the received analog spread-spectrum signal is attenuated when the amplitude of the digital spread-spectrum signal is greater than an first threshold

(upper threshold) (col. 4 lines 55-59), the received analog spread-spectrum signal is not attenuated when the amplitude of the digital spread-spectrum signal is less than a second threshold (lower threshold) (col. 23 lines 14-17, the loop is disabled when the dynamic range falls below 45dB (lower threshold), wherein the first threshold (upper threshold) is greater than the (second threshold) lower threshold (col. 4 lines 46-60 and col. 23 lines 9-23,"Younis"; the attenuator (fig. 2 (1216)) attenuates the amplitude of the input signal based on the ADC signal. The dynamic range threshold is enabled and disabled based on the upper and lower threshold).

a transition (enabling or disabling state, col. 23 lines 10-12) from the received analog spread-spectrum signal not being attenuated to the received analog spread-spectrum signal being attenuated occurs after the amplitude of the digital spread-spectrum signal is greater than the first threshold for a first specified amount of time (col. 23 lines 13-15) and a transition (enabling or disabling state, col. 23 lines 10-12) from the received analog spread-spectrum signal being attenuated to the received analog spread-spectrum signal not being attenuated occurs after the amplitude of the digital spread-spectrum signal is less than the second threshold for a second specified amount of time (col. 23 lines 13-15), does not explicitly teach the amplitude of the digital spread-spectrum signal is greater than the first threshold for a first specified amount of time and the amplitude of the digital spread-spectrum signal is less than the second threshold for a second specified amount of time.

Instead, Younis discloses the dynamic range is selected with respect to attenuation on the basis of hysteresis which required timing. The dynamic range is furthermore selected based on other numerous considerations (for example, statistics input of the RF input, table 1-3, col. 21 lines 35-55).

Therefore, it would have been rendered obvious to one skilled in the art to use Younis's dynamic range selection for the benefit of minimizing power consumption.

4. Claims 3, 8-10,12-16, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brueske et al. US, 6,670,901 in view of Younis et al. US, 6,134,430 in further view Lin US 2003/0142730

Re claim 3, the modified invention as claimed in claim 1 does not teach wherein the selectively attenuated analog spread-spectrum signal has negative signal-to-noise ratio (SNR).

However, Lin teaches the selectively attenuated analog spread-spectrum signal has negative signal-to-noise ratio (SNR), (fig.4 shows RF/analog (410) that converts the received CDMA signal to analog signal controlled by the processor (480) which has negative value SNR (para#66)).

Therefore, taking the combined teaching of Brueske, Younis and Lin as a whole would have been rendered obvious to one skilled in the art to modify

Brueske and Younis to utilize attenuated analog spread-spectrum signal having negative signal-to-noise ratio (SNR) for the benefit of calculating the noise estimate of the CDMA receiver where the noise estimate takes into account possible correlation between signals (para#82).

Re claim 8, the modified invention as claimed in claim 1, wherein the filtering attempts to compensate for off-channel interference in the received analog spread-spectrum signal (col. 4 lines 63 to col. 5 line 4; the digital filters (323,325) further attenuate the (I,Q) channels to compensate for the off-channel Interference,"Brueske");

the received analog spread-spectrum signal is attenuated when the amplitude of the digital spread-spectrum signal is greater than an upper threshold (col. 4 lines 46-60,"Younis"), the received analog spread-spectrum signal is not attenuated when the amplitude of the digital spread-spectrum signal is less than a lower threshold (col. 23 lines 14-17, the loop is disabled when the dynamic range falls below 45 dB,"Younis"),

the upper threshold is greater than the lower threshold by an amount greater than the level of selective attenuation in order to provide hysteresis in the attenuation determination (col. 22 lines 50 to col. 23 lines 9-23,"Younis" (fig.11); Younis teaches upper threshold and lower threshold and the dynamic range threshold with the hysteresis to prevent toggling. With 6 dB hysteresis, when the threshold exceeds 51 dB loop (110a) is enabled and when the threshold is below 45dB is disabled).

the received analog spread-spectrum signal is a radio frequency (RF)

signal; and further comprising:

converting the RF signal to an intermediate frequency (IF) prior to the digitization (col. 6 lines 34-38," Younis"); and converting the IF signal to baseband after digitization (col. 4 lines 4-14,"Younis") and

filtering and the de-spreading are implemented at baseband (fig.4 (1250; demodulator), col. 7 lines 50-55," Younis").

The combined modified invention of Brueske and Younis does not teach wherein the selectively attenuated analog spread-spectrum signal has negative signal-to-noise ratio (SNR).

However, Lin teaches the selectively attenuated analog spread-spectrum signal has negative signal-to-noise ratio (SNR), (fig.4 shows RF/analog (410) that converts the received CDMA signal to analog signal controlled by the processor (480) which has negative value SNR (para#66)).

Taking the combined teaching of Brueske and Younis as a whole would have been rendered obvious to one skilled in the art to modify Younis to utilize a filter to compensate for off-channel interference for the benefit of yielding the desired signal at the minimum power consumption.

Therefore, taking the combined teaching of Brueske, Younis and Lin as a whole would have been rendered obvious to one skilled in the art to modify Brueske and Younis to utilize attenuated analog spread-spectrum signal having negative signal-to-noise ratio (SNR) for the benefit of calculating the noise estimate of the CDMA receiver where the noise estimate takes into account possible correlation between signals (para#82).

Re claim 9, Brueske discloses in a spread-spectrum receiver (fig.3), a method for processing a received analog spread-spectrum signal comprising:

A variable attenuator (LNA/VGA) adapted to attenuate the received analog spread-spectrum signal (col. 3 lines 65 to col. 4 lines 10);

an analog-to-digital converter (ADC (fig.3 (A/D (319,321)) adapted to digitize the selectively attenuated analog spread-spectrum signal to generate a digital spread-spectrum signal (col. 4 lines 39-45);

An interference-compensation filter (digital filters (fig.3 323,325)) adapted to filter the digital spread-spectrum signal in an attempt to compensate for interference in the received analog spread-spectrum signal to generate a filtered digital spread-spectrum signal (col. col. 4 lines 63-67), a controller (307) adapted to control the variable attenuator based on the amplitude of the digital spread-spectrum signal prior to the interference-compensation filtering and the de-spreading (col. 4 lines 22-25); does not teach digital processor adapted to de-spread the filtered digital spread-spectrum signal.

However, Younis discloses a digital signal processor (demodulator, 1250)) for de-spreading the filtered digital spread-spectrum signal to generate a de-spread digital signal (col. 7 lines 20-24, CDMA format col. 8 lines 26-31).

The combined modified invention of Brueske and Younis does not teach wherein the selectively attenuated analog spread-spectrum signal has negative signal-to-noise ratio (SNR).

However, Lin teaches the selectively attenuated analog spread-spectrum signal has negative signal-to-noise ratio (SNR), (fig.4 shows RF/analog (410) that

converts the received CDMA signal to analog signal controlled by the processor (480) which has negative value SNR (para#66)).

Therefore, taking the combined teaching of Brueske and Younis as a whole would have been rendered obvious to one skilled in the art to modify Brueske to utilize a digital signal processor as despreader for the benefit of yielding the desired signal.

Therefore, taking the combined teaching of Brueske, Younis and Lin as a whole would have been rendered obvious to one skilled in the art to modify Brueske and Younis to utilize attenuated analog spread-spectrum signal having negative signal-to-noise ratio (SNR) for the benefit of calculating the noise estimate of the CDMA receiver where the noise estimate takes into account possible correlation between signals (para#82).

Re claim 10, the modified invention as claimed in claim 9, wherein the filtering is adapted to attempt to compensate for off-channel interference in the received analog spread-spectrum signal (col. 4 lines 63 to col. 5 line 4; the digital filters (323,325) further attenuate the (I,Q) channels to compensate for the off-channel Interference,"Brueske").

Re claim 12, the modified invention as claimed in claim 9, wherein:
the controller (fig. 2 (1260;AGC control circuit) is adapted to control the variable attenuator to attenuate the received analog spread-spectrum signal when the amplitude of the digital spread-spectrum signal is greater than an upper threshold
The controller (fig. 2 (1260; AGC control circuit) is adapted to control the variable attenuator not to attenuate the received analog spread-spectrum signal when the

amplitude of the digital spread-spectrum signal is less than a lower threshold, wherein the upper threshold is greater than the lower threshold (col. 4 lines 46-60 and col. 23 lines 9-23,"Younis"; the attenuator (fig. 2 (1216)) attenuates the amplitude of the input signal based on the ADC signal. The dynamic range threshold is enabled and disabled based on the upper and lower threshold).

Re claim 13, the modified invention as claimed in claim 12, wherein the upper threshold is greater than the lower threshold by an amount greater than the level of selective attenuation in order to provide hysteresis in the attenuation determination (col. 22 lines 50 to col. 23 lines 9-23,"Younis" (fig.11); Younis teaches upper threshold and lower threshold and the dynamic range threshold with the hysteresis to prevent toggling. With 6 dB hysteresis, when the threshold exceeds 51 dB loop (110a) is enabled and when the threshold is below 45dB is enabled).

Re claim 14, the modified invention as claimed in claim 9, wherein:

the received analog spread-spectrum signal is a radio frequency (RF) signal; and further comprising:

mixer adapted to convert the RF signal to an intermediate frequency (IF) prior to the digitization (col. 6 lines 34-38," Younis"); and a digital downconverter (fig.4 (1414a and 1414b) adapted to convert the IF signal to baseband after digitization (col. 7 lines 42-46,"Younis").

Re claim 15, the modified invention as claimed in claim 14, wherein the filtering and the digital processor are implemented at baseband (fig.4 (1250; demodulator), col. 7 lines 9-20," Younis").

Re claim 16, the modified invention as claimed in claim 9, wherein the filtering is adapted to attempt to compensate for off-channel interference in the received analog spread-spectrum signal (col. 4 lines 63 to col. 5 line 4; the digital filters (323,325) further attenuate the (I,Q) channels to compensate for the off-channel Interference,"Brueske");

the controller (fig. 2 (1260;AGC control circuit) is adapted to control the variable attenuator to attenuate the received analog spread-spectrum signal when the amplitude of the digital spread-spectrum signal is greater than an upper threshold (col. 4 lines 46-60,"Younis"),the controller (fig. 2 (1260; AGC control circuit) is adapted to control the variable attenuator not to attenuate the received analog spread-spectrum signal when the amplitude of the digital spread-spectrum signal is less than a lower threshold (col. 23 lines 14-17, the loop is disabled when the dynamic range falls below 45 dB,"Younis"),

the upper threshold is greater than the lower threshold by an amount greater than the level of selective attenuation in order to provide hysteresis in the attenuation determination (col. 22 lines 50 to col. 23 lines 9-23,"Younis" (fig.11); Younis teaches upper threshold and lower threshold and the dynamic range threshold with the hysteresis to prevent toggling. With 6 dB hysteresis, when the threshold exceeds 51 dB loop (110a) is enabled and when the threshold is below 45dB is disabled);

the received analog spread-spectrum signal is a radio frequency (RF) signal; and further comprising:

mixer adapted to convert the RF signal to an intermediate frequency (IF)

prior to the digitization (col. 6 lines 34-38," Younis"); and a digital downconverter (fig.4 (1414a and 1414b) adapted to convert the IF signal to baseband after digitization (col. 7 lines 42-46,"Younis").

Taking the combined teaching of Brueske and Younis as a whole would have been rendered obvious to one skilled in the art to modify Younis to utilize a filter to compensate for off-channel interference for the benefit of yielding a desired signal at the minimum power consumption.

Re claim 22, Brueske discloses in a spread-spectrum receiver (fig.3), a method for processing a received analog spread-spectrum signal comprising:

determining whether to attenuate the received analog spread-spectrum signal (col. 3 lines 65 to col. 4 lines 10);

based on the attenuation determination, selectively attenuating the received analog spread-spectrum signal to generate a selectively attenuated analog spread-spectrum signal (col. 4 lines 22-33);

digitizing the selectively attenuated analog spread-spectrum signal to generate a digital spread-spectrum signal (col. 4 lines 39-45) and;

filtering (digital filters (fig.3 323,325)) the digital spread-spectrum signal in an attempt to compensate for interference in the received analog spread-spectrum signal to generate a filtered digital spread-spectrum signal (col. col. 4 lines 63-67), the attenuation determination based on the amplitude of the digital spread-spectrum signal prior to the interference-compensation filtering and the de-spreading (col. 4 lines 22-25), does not teach de-spreading the filtered digital spread-spectrum signal.

However, Younis discloses a digital signal processor (demodulator, 1250)) for de-spreading the filtered digital spread-spectrum signal to generate a de-spread digital signal (col. 7 lines 20-24, CDMA format col. 8 lines 26-31).

The combined modified invention of Brueske and Younis does not teach wherein the selectively attenuated analog spread-spectrum signal has negative signal-to-noise ratio (SNR).

However, Lin teaches the selectively attenuated analog spread-spectrum signal has negative signal-to-noise ratio (SNR), (fig.4 shows RF/analog (410) that converts the received CDMA signal to analog signal controlled by the processor (480) which has negative value SNR (para#66)).

Therefore, taking the combined teaching of Brueske and Younis as a whole would have been rendered obvious to one skilled in the art to modify Brueske to utilize a digital signal processor as despreader for the benefit of yielding the desired signal.

Therefore, taking the combined teaching of Brueske, Younis and Lin as a whole would have been rendered obvious to one skilled in the art to modify Brueske and Younis to utilize attenuated analog spread-spectrum signal having negative signal-to-noise ratio (SNR) for the benefit of calculating the noise estimate of the CDMA receiver where the noise estimate takes into account possible correlation between signals (para#82).

5. Claims 21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brueske et al. US, 6,670,901 in view of Younis et al. US, 6,134,430 in further view of Hess et al. US 5,812,600

Re clam 21, the modified invention of Brueske and Younis do not disclose attenuation determination is further based on a priori knowledge of maximum expected interference-to-carrier ratio.

However, Hess discloses attenuation determination is (120) on a priori knowledge of maximum expected interference-to-carrier ratio (col. 2 lines 20-27).

Therefore, taking the combined teaching of Brueske, Younis and Hess as a whole would have been rendered obvious to one skilled in the art to modify Brueske and Younis to utilize maximum expected interference-to-carrier ratio for the benefit of reducing the effects of distortion introduced to further enhance the dynamic range of the receiver's signal determinator.

Re claim 23, Brueske discloses in a spread-spectrum receiver (fig.3), a method for processing a received analog spread-spectrum signal comprising:

determining whether to attenuate the received analog spread-spectrum signal (col. 3 lines 65 to col. 4 lines 10);

based on the attenuation determination, selectively attenuating the received analog spread-spectrum signal to generate a selectively attenuated analog spread-spectrum signal (col. 4 lines 22-33);

digitizing the selectively attenuated analog spread-spectrum signal to generate a digital spread-spectrum signal (col. 4 lines 39-45) and;

filtering (digital filters (fig.3 323,325)) the digital spread-spectrum signal in an attempt to compensate for interference in the received analog spread-spectrum signal to generate a filtered digital spread-spectrum signal (col. col. 4 lines 63-67), the attenuation determination is based on the amplitude of the digital spread-spectrum signal prior to the interference-compensation filtering and the de-spreading (col. 4 lines 42-44), does not teach de-spreading the filtered digital spread-spectrum signal.

However, Younis discloses a digital signal processor (demodulator, 1250)) for de-spreading the filtered digital spread-spectrum signal to generate a de-spread digital signal (col. 7 lines 20-24, CDMA format col. 8 lines 26-31).

The modified invention of Brueske and Younis do not disclose attenuation determination is further based on a priori knowledge of maximum expected interference-to-carrier ratio.

However, Hess discloses attenuation determination is (120) on a priori knowledge of maximum expected interference-to-carrier ratio (col. 2 lines 20-27).

Therefore, taking the combined teaching of Brueske, Younis and Hess as a whole would have been rendered obvious to one skilled in the art to modify Brueske and Younis to utilize maximum expected interference-to-carrier ratio for the benefit of reducing the effects of distortion introduced to further enhance the dynamic range of the receiver's signal determinator.

Therefore, taking the combined teaching of Brueske and Younis as a whole would have been rendered obvious to one skilled in the art to modify

Brueske to utilize a digital signal processor as despreader for the benefit of yielding the desired signal at the minimum power consumption.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rahel Guarino whose telephone number is 571-270-1198. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Payne David can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rahel Guarino/
Examiner, Art Unit 2611

/David C. Payne/

Supervisory Patent Examiner, Art Unit 2611